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# Mapping histories: cultural landscapes and walkabout methods

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## INTRODUCTION

This chapter considers "cultural mapping" as an ethnographic method. Like many anthropological ideas (and indeed the concept of "culture" itself), this methodology has achieved wider utility. UNESCO makes use of it, as do many local community projects. There are now cultural mapping "toolkits" available, and newsletters and websites designed to assist people in employing these. Here, however, we are concerned with cultural mapping as a scientific method for the systematic collection of social data.

Cultural mapping explores people's historical and contemporary relationships with local environments. It entails "going walkabout" with informants in the places that they consider to be important, and collecting social, historical and ecological data *in situ*. It observes that places not only reflect the physical materialization of cultural beliefs and values, they are also a repository and a practical mnemonic of information. Thus the process is simultaneously an exercise allowing the collection of basic site and area-specific data; a participatory and observational exercise focused on people's interactions with places; a process of elicitation, enabling informants to articulate the cultural landscapes and territorially situated ethnohistories embedded in a physical topography; and a collaborative process through which cultural representations of the area are composed. Interviewing informants "in place" draws on both experiential and abstract forms

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of knowledge, and the use of "walkabouts" provides a relaxed and productive context for interviews.

The process is systematic and comprehensive and collects both visual and textual material. Places are literally "mapped," sometimes informally, using and adapting existing maps and sketches, or more formally, using GIS technology, satellite imagery and related technologies. Interviewing is generally a mix of informal and more structured approaches. A range of datasets can be sought including, for example, topographic and ecological information; local histories; socio-spatial information; ownership and rights of access; local ecological knowledge; religious beliefs and mythologies; economic practices, and resource use and management. The major objective is to gain an in-depth, holistic view of people's engagements with the places that they inhabit, and to illuminate particular cultural and ethnohistorical landscapes. In addition to providing comparative data for analytic questions about human–environmental interactions, this methodology is helpful in resolving conflicts over land and resources, and in considering issues of environmental management (and co-management) (see Sillitoe 1998). Cultural mapping exercises often intersect with related methods such as "counter-mapping" and Participatory Action Research (PAR).[1]

Any ethnographic or ethnohistorical research can gain from employing cultural mapping methods, but this chapter suggests that it is an especially valuable approach for environmental anthropology. Why should this be so? It is intuitively obvious that a spatially oriented approach would fit well in an area focused on human–environmental interactions. But cultural mapping can also illuminate some core theoretical issues. How do people inhabit and make sense of places? How do their sensory experiences and cognitive processes articulate with the material environments that they encounter? How do they represent notions of space and time?

Map-making is fundamental to human–environmental relationships. Cognitive and sensory engagement with the world entails a process of creative "mapping." Inhabiting a particular ecological context, human groups are confronted with a practical necessity to organize themselves spatially; to map resources and to manage their economic use of these. They act creatively upon their physical surroundings, producing cultural landscapes composed of ideas, categories, knowledges

[1] These terms are sometimes conflated as Participatory Action Research Mapping (PARM) (see Herlihy and Knapp 2003; McIntyre 2008).

and values; social and spatial arrangements; economic and political practices; and religious and scientific cosmologies. As Benjamin's influential work illustrated (1970), there are complex linkages between spatialities, histories and the production of cultural identity (see also Carter 1987).

This suggests three major dimensions of human–environmental relationships to consider in relation to cultural mapping. First, the basic processes of engagement, in which map-making and storytelling are central to people's capacities to "make sense" of their place (and emplacement) in the world; second, the mutually constitutive formations of material and ideational cultural landscapes – places formed by human activities and spatialities imbued with memories, meaning and identity; and, third, the representational forms that express particular relationships with place. The latter are also recursive: Foucault's observation that words, stories, narratives, discourses and texts "form the objects of which they speak" (1972: 54) is readily applied to the making of places through both narrative and graphic representations.

Cultural landscapes also reflect political relations. Cosgrove (1989) observed that they reproduce the norms and values of dominant groups, and Keith and Pile suggest that "all spatialities are political because they are the (covert) medium and (disguised) expression of asymmetrical relations of power" (1993: 38). Around the world there are many longstanding contests for social, economic, and political dominance, and for the ownership and control of land and resources. The representations that people make of their particular cultural landscapes are central to these contests, forming vital discursive objects in political negotiations (see Bender 1998; Orlove 1991, 1993).

A map can be composed in many ways: with a dot painting; a song; a story; a dance; a series of knots; a drawing in the sand; and, of course, with cartographic techniques. All function to reduce complex spatial information to a manageable, communicable form, and many encapsulate temporal elements through the inclusion of narrative. Indeed, in approaching the analysis of maps, it may be best to discard conventional distinctions between graphic and narrative forms of representation, as they are generally intertwined, with spatial imagery appearing in even the most linear of narratives, and – though it is more challenging to explicate – temporal change embedded in purportedly "spatial" representations.

Some forms of mapping are particularly successful in articulating temporal information, and these can inform the design of cultural

mapping projects focused on ethnohistorical issues. Examples include the ancient "itinerary maps" that described early journeys across Europe; the "diary maps" of explorers; and Australian Aboriginal song lines, which conflate topographical information with narratives of ancestral journeys and creative activities. As well as providing representational models encompassing temporality, these draw attention to the use of a physical landscape as a repository for memory (see Kuchler 1993; Morphy 1993; Schama 1996; Stewart and Strathern 2003). Such mnemonic use of a physical environment for the location of social data is particularly evident in non-literate societies, where Henige (1982) suggests "remembering" is a more vital skill,[2] but it is plain that all human societies locate memories and meanings in place.

Cultural mapping produces representations that can be interrogated in a variety of ways, and it can also be considered reflexively, as a process of collaboration. In this sense it may involve all three of the activities that Banks and Morphy define as "visual research methods": making visual representations; the analysis of existing representations; and the collaborative production of visual representations (1997: 14). Visual media have become an increasingly important part of ethnographic research (Pink 2001, 2006). As well as producing spatial representations, cultural mapping is often supplemented by photography, video and film, GIS databases, digital, and hypermedia.

Because of its capacity to represent specifically cultural perspectives, mapping exercises are often used in Participatory Action Research (PAR) or "counter-mapping," in which researchers assist communities' efforts to protect or regain land ownership and access to resources, to prevent environmental degradation and social disruption, or simply to uphold a particular cultural identity (see Reason and Bradbury 2008). This more egalitarian collaborative approach, initiated by the reflexive critiques of feminist scholars in the 1960s and 70s, often involves direct advocacy, which some writers argue is a predictable outcome of long-term ethnographic relationships (see Ramos 2004). Even when this is not the case, the ethical codes governing contemporary ethnographic

[2] As he notes:

> Members of literate societies can be selective or careless in retaining memories, yet still be able indefinitely to retrieve some of what they have forgotten.
>
> Because members of oral societies do not have this opportunity, the past necessarily assumes a very different role for them. The vague collective memory is formalized, systematized, replenished with details, and shaped into formal traditions time and time again… without effective mnemonic devices forgetting is a disease without a cure. (Henige 1982: 5)

research have encouraged researchers to give closer consideration to the equality of relationships with informants and the benefits of their research for all of the people involved.

Thus projects are often co-designed with host communities; data collection is undertaken in partnership; and research outputs – textual and visual – are co-produced. Typically this shapes projects more closely in accord with community needs (see Durington 2004). In making cultural maps, researchers either work directly with members of a community, or facilitate the process by suggesting methodological approaches and providing training, technology, and advice.

Such collaborations create what Flores describes as "hybrid products" (2004).[3] They also raise a set of ethical issues about ownership. Who owns the research process? Who makes the decisions about its aims and methods? And, most particularly, who owns the outputs of the research? All of these issues need to be considered and negotiated. With claims for land and resources increasingly involving adversarial legal contests, maps can be a particularly sensitive form of representation, and careful thought therefore needs to be given to the possible ramifications of producing outputs that may be used by all parties in a legal process. To provide an illustrative anecdote: a few years ago, the head of the Native Title Tribunal visited the Pitt Rivers Museum in Oxford. As a local Australianist, I was sent to meet him. "Oh yes, " he said, "I know your name: your book landed on my desk recently as Exhibit Number 11."

Exhibit Number 11 was a comparative ethnography which considered the very different cultural landscapes of Aboriginal groups and graziers[4] in the Mitchell River area in North Queensland (Strang 1997). I had subsequently produced several further cultural mapping reports for the Aboriginal community in Kowanyama. These and later research with groups in the Brisbane River catchment provide case studies through which we can explore the cultural mapping process.

[3] The notion of hybridity, as I have argued elsewhere (Strang 2006), suggests that anthropological knowledge is itself is the product of long-term intellectual exchanges across cultural boundaries. On this basis, it has been argued that all ethnographic representations are hybrid products (Arce and Fisher 2003; Clifford and Marcus 1986; Lassiter 2005), although there are wide variations in the way that working relationships with informants are constructed; in the degree of equality involved; and in the level of host communities' participation in the research.

[4] This term is used in Australia to describe cattle ranchers.

## MAPPING ALONG THE MITCHELL

The Aboriginal community in Kowanyama, composed of approximately 1200 people belonging to Kunjen, Kokobera, and Yir Yoront language groups,[5] is located on the west coast of Cape York, near the mouth of the Mitchell River. The ex-mission reserve area encompasses some of the traditional land of each of these groups, but this also extends into neighboring cattle stations and the Mitchell-Alice River National Park. Being remote, the area was only visited sporadically by Europeans until the early 1900s. Early exploratory meetings with indigenous people were generally marred by violence, which continued in the early days of settlement of the area. By the mid 1900s, Aboriginal people were either living in the Anglican mission reserve area established in 1903, or providing unpaid labor on neighboring cattle stations in order to remain on their traditional "country." Legislation in the 1960s requiring wages to be paid for this work saw them expelled from the stations into the mission, which was then handed to the State following a major hurricane in 1964. The reserve area was given to the community under a Deed of Grant in Trust in 1987, and some degree of self-governance was achieved with the establishment of an Aboriginal council, and – presciently – an office for the management of Aboriginal land and resources.

In the early 1990s the Aboriginal elders asked me to assist them in mapping their traditional "story places"[6] in the Mitchell-Alice River National Park. They were hopeful that new legislation would enable them to reclaim their traditional country, or at least gain some voice in the management and use of it.[7] They were equally concerned that, under contemporary social, economic and educational pressures, traditional knowledge was not being passed on to younger generations

[5] The Kunjen group is also described as Olkol language speakers. The Yir Yoront group was famously studied by Lauriston Sharp in the 1930s. Sharp compiled detailed maps, ethnographic, and genealogical records, which have proved to be an invaluable historical resource for the community.

[6] In north Queensland, sacred sites are called Story Places and the ancestral era from which Aboriginal Law has been passed down is called the Story Time. In other parts of Australia this has been described as the Dreamtime.

[7] The Native Title Act (1993) was passed shortly afterwards. This was a landmark act which, after 200 years of denial, admitted that Aboriginal Australians had had a system of land ownership, and could claim land where this title had not been extinguished. The political furor that followed led to the fall of the Keating Government and to the election of John Howard, who set about "revising" the Act substantially.

effectively. They wanted this knowledge recorded systematically "for future generations." Many of the most knowledgeable members of the community were aging and increasingly frail. There was an urgent need for this work to be done, and a great deal of it to do – as one Kunjen elder said: "All year you got to travel, to show you the country." (Paddy Yam 1992).[8]

Working with the Land Office and the Aboriginal Rangers, I therefore organized a number of trips out to the National Park with key groups. These were planned in accord with the community's priorities about where we should go, and which sites should be visited. They were keen to be as systematic and comprehensive as possible, encompassing all of the culturally important sites within the park area, and focusing especially on the "story places." This cohered readily with a scientific approach to cultural mapping, in which such planning generally entails gathering information about all relevant sites, while also getting a sense of which are particularly significant.

Given the distance from the settlement, and the logistical realities, it was then necessary to negotiate who should be included in the process. There was more divergence in aims here. In general, ethnographers hope to engage with a diverse cross-section of informants in any cultural group: a representative sample of each generation, gender, class, and so forth. However, Aboriginal societies are gerontocratic, with people (both men and women) gaining restricted – often sacred – knowledge as they pass through each stage of life. The community's elders are firmly positioned as the authoritative holders of cultural information and are therefore seen as the "proper" experts in a cultural mapping process. This control of cultural information, and of the collaborative research itself, both reflected and upheld their political authority.

Our achievement of a useful compromise was assisted by the reality that, at that time, organizing cultural mapping expeditions was quite logistically challenging. It entailed getting hold of several reliable vehicles (it being essential to have more than one in an area where getting bogged is a regular occurrence); gathering sufficient camp gear and equipment for the exercise; and ensuring that we had

[8] All of the language groups in Kowanyama were keen to work with anthropologists and archaeologists in this regard: John Taylor had done useful mapping work in the 1970s in the adjoining Aboriginal community at Pormpurraw (see Taylor 1975), and the Kowanyama community also persuaded Bruno David and John Cordell to assist them with this kind of work in the early 1990s (see David and Cordell 1993). I collaborated with Bruno David in some of this work.

sufficient recording equipment, films, and tapes (the latter having to be sent from Cairns). There were other practical challenges in taking a number of elderly people far from the settlement and its support facilities; carrying sufficient food and fuel; and getting around sites in areas that sometimes degenerate into "packhorse country."[9] On our first mapping foray I did all the camp cooking myself, which was detrimental not only to the data collection, but doubtless to the health of the group as well. On subsequent trips the Land Office was persuaded to employ a couple of my adoptive "aunties" as camp cooks. Not only was this more manageable (and edible), it served to bring more women into the project, thus equalizing the gender representation within the group. With a need for several drivers it was also possible to include several of the rangers from the Land Office and their families, which brought a number of younger people into the process. Nevertheless, the formal responsibility for the provision of cultural information at each site remained with the elders, and information from the younger people had to be sought less formally and with some diplomacy, as they shared the view that the elders were the proper people to speak about cultural knowledge.

There were other logistical challenges with implications for the process of data collection. GPS devices were relatively new technology at the time, and reception in the area was not always reliable. However, we were able to triangulate our site markings subsequently with OS maps and aerial photographs, which helped iron out some of the anomalies of the readings. I used a range of methods of data collection, taking photographs everywhere we went, and recording video interviews with the elders (and occasionally others) at each site. I also audiotaped many longer interviews, beginning with a series of formal questions and then expanding the discussion with more open queries. I did many opportunistic informal interviews; employed standard participant observation techniques to observe how people engaged with each place; and made copious notes and sketches (see Figure 7.1). Over time, I also found it useful to use the photographs and sketches as elicitative tools for discussing the landscape with a wider range of people.

[9] Most of this area is impassable in the wet season, and, even in the dry, the roads can be very rough. It was necessary to ford sizeable rivers and creeks, large dry creek beds, and to push through much dense scrub. My Aboriginal collaborators apparently believed that a vehicle could be taken anywhere that one could take a horse – thus, over time, our expeditions ventured further and further into roadless, trackless "packhorse country."

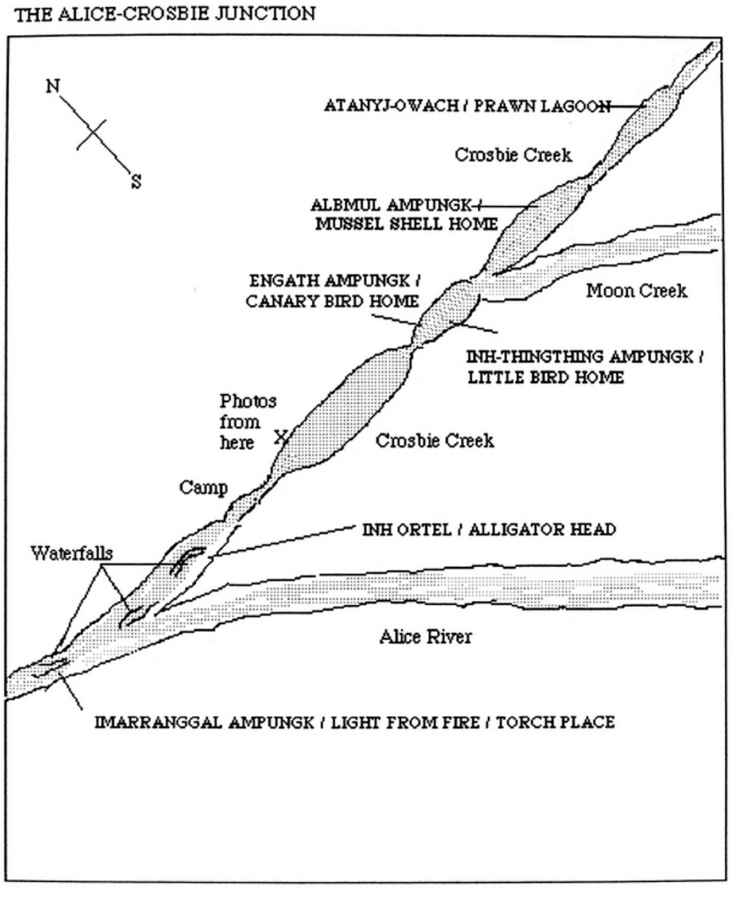


Figure 7.1 Sketch map of story places at the junction of the Alice River and Crosbie Creek, Cape York, made with Kunjen elders.

The hot, dusty environment of northern Australia can be fairly unkind to recording equipment, requiring a willingness to fall back on notes and sketches at times. However, this had some major compensations: a discursive collaboration involving sketching is invariably productive, particularly when informants can be persuaded to produce their own sketches.[10] As Afonso says, this often produces useful iterative material: "By offering local interlocutors the possibility of actively participating in creating, codifying and suggesting corrections to the

[10] Many of these were done on the ground with a sharp stick – a classic Queensland mapmaking method for both Aboriginal people and graziers.

sketches, it involved them in further constructing their discourses and reinterpreting their memories" (2004: 87).

The mix of formal and informal recording methods produced different kinds of information. For example, video recording encouraged some of the elders to give rich performative renditions of the ancestral stories at each site, providing the sounds and movements of the totemic ancestors, the calls of birds, and the histrionics of the *dramatis personae*. This produced a terrific record for the community archives. But less formal interviewing permitted more rambling flows of information and questioning, which opened up other areas of enquiry. Thus the mapping process gained from employing a range of data recording techniques, which not only provided a practical "Plan B" when equipment succumbed to the environmental stresses, but also increased the diversity of form and content in the data collected.

So, what kinds of data should be collected in a cultural mapping project? We might consider two levels here: the contextual and the particular. From an ethnographic or ethnohistorical perspective, cultural mapping data, like any social data, are best considered in relation to a contextualising "background" comprehensively encompassing all of the key aspects of cultural life: historical information; social and spatial organization; economic activities; cosmological beliefs; political arrangements; and laws and moral principles. These various dimensions of human life provide a basic set of questions about places. Who owns, lives here, or uses this place? How do they use it? How do they understand and think about it? How do they make decisions about it? What events have shaped their interactions with it over time? What do the features of the place mean to them? Social data also require a material context, which leads to complementary questions about the sites themselves. Where is this place? What does it look like? What features and resources does it contain? How has it changed over time? What are the local ecological opportunities and constraints?

But each cultural mapping project has its own aims, and it is these that define the areas of enquiry that are approached more intensively. In this case, the holistic nature of Aboriginal worldviews meant that the elders' aims were very compatible with the "contextualising" ethnographic process – they were keen to record everything about each place. However, they foregrounded in particular the importance of recording the "stories": the ancestral myths located in the landscape, and the way that these defined who owned and had rights to each tract of land and its resources. And they were equally clear that

they wanted to record the Aboriginal history of the area, which had previously been subsumed by European historical accounts.

From my perspective, these emphases were fine, since my research was focused on cultural landscapes and environmental values, and I was therefore happy (both intellectually and politically), to have the project shaped in accord with what my Kunjen collaborators thought was most important: accepting their direction was clearly a useful way to allow their particular values to emerge. This raises a useful point. In an academic environment requiring formalized grant proposals and subjecting researchers to constant auditing, ethnographers and historians often go into the field with a clear-cut list of the kinds of data deemed necessary for answering a particular research question. It is easy for this to become quite prescriptive and thus constraining. However, in terms of producing good ethnography or ethnohistory (i.e., effective representations of an emic perspective) it is vital to ensure that there are plentiful opportunities for informants to foreground what *they* think is important, not just in the co-design of the research, but also throughout the research process.

With this in mind, I had a number of meetings with key groups. These were composed primarily of the Kunjen clans for whom the park area was "country." In such a small community it was plain which families could "speak for that country," but working in larger research contexts I have made use of focus groups or social and professional networks. Similarly, in Kowanyama, arriving at a consensus about the project was also unproblematic, and did not require consensus analysis, or the kinds of negotiated design steps that might be needed in a less cohesive context. Following discussions about the kinds of data that were needed, I prepared a *pro forma* for mapping the sites. This included fields for the following information:

- date of the site visit;
- audio and/or video tape number;
- photographic film number (with a subset of numbers for photographs);
- GPS coordinates;
- site language name, and a translation;
- clan tract language name, and a translation;
- notes on language (some sites in the park also having non-Kunjen/Olkol names or names in the "respect language" Uw-Ilbmbanhdhiy);
- non-Aboriginal name of site;

- physical features of the site;
- totemic association for the site;
- synopsis of the related ancestral story(s);
- description of any related rituals and prohibitions;
- past and contemporary usages of the site;
- "bosses" for that place;
- associated clan names;
- related family names;
- historical data;
- "other information".

It will be apparent that the *pro forma* was intended as a system of data management as well as a checklist of key questions and areas of enquiry. Effective information management was vital, as the time available for each trip was limited and the mapping process commensurately intense. At the time, I made use of a computerized database I had designed prior to going into the field: a customized (one might say bastardized) Hypercard indexing system, with key areas relating to the information on the *pro forma*. There are now many "off the shelf" and doubtless vastly superior data management systems available, any of which are usable: the main requirement is that researchers can lay out a detailed landscape of data and find their way around it easily. But this basic necessity reminds us, of course, that data collection is in itself a process of virtual map making.

Many researchers add a further level of detail to basic index categories with a set of keywords or codes, which they insert as they collect data or take notes, so that they can search, find, and extract subthemes readily. I used quite a few of these, adding them, for example, where material related to issues such as "values," or "identity," which were the focus of my own research, or where people covered specialized topics, such as "legal" or "economic" issues. I also collected language terms and coded these too.[11]

There is no doubt that designing an organizational database and set of keywords is an excellent exercise prior to going into the field, but this is largely because it requires a thorough assessment of the aims of the research, and the kinds of data that are needed, and thus serves to clarify the project. However, in the field, considerable iterative adaptation and simplification of this system is often necessary,

[11] The *lingua franca* in Kowanyama is Aboriginal English, but at the time there were still some fluent Kunjen speakers, and I tried to record as much of the orthography as possible.

and it is probably a good idea to anticipate this.[12] And, as noted above, it is also critical to leave the door open to what the host community thinks is important.

In the Mitchell-Alice area, the actual mapping process was straightforward: the elders had a comprehensive and precise mental map of the park, and directed us from one key site to another. Most of these were water sources: creeks, waterholes and lagoons. At each, the elders who were "bosses" for that place would "tell the story." Although we had discussed the sites when planning the trip back in Kowanyama, this on-site process produced a set of data that was a quantum leap forward in terms of depth and detail, clearly tapping into a fountain of information held mnemonically in the landscape. Ancestral stories, histories, genealogies, key events, patterns of use, rituals, prohibitions, and a whole set of connections with related people and places would pour forth. The elders pointed out the key resources at each site, naming trees and plants, and discussing their uses, and recalling the kinds of fish and game to be found.[13] They noted many physical signs of use: scars in trees where shields, boomerangs, or burial bark had been cut; creeks where fish weirs had been built; stands of timber where they had collected spears or cabbage palm leaves for string; and the domiculture clustered around regular camp sites.

There was a constant flow of historical data about "early days": accounts of massacres and poisonings of local clans; the capture of women for enforced concubinage, and other events of the early colonial era. The elders noted the establishment of Koolatah Station nearby, and the pros and cons of the various sites at which the homestead had been located. Most had been stock workers for the station, and places therefore contained memories of events that had occurred during this time: where one man had been thrown from his horse and injured; where a bull had bailed up and had to be shot; where the stock team had had its "dinner camps."

The most important material was concerned with the ancestral story places and their tracks (or songlines) linking sites in the park and beyond. These sites are also known as "poison places," referring

[12] I suspect that most of us, flushed with early career-stage enthusiasm, tend to produce over-elaborate database management systems at first, and then, finding that these are too unwieldy or constraining, adopt simpler, more flexible approaches later on.

[13] In many places people had fishing lines in the water almost before I had turned off the truck engine, and this and other food gathering allowed us to extend the time that we could spend away from the settlement.

to the powerful concentration of ancestral forces that they contain. The elders systematically related the ancestral stories for each site and noted the related tracks. On arriving at each place, they called out to the ancestral beings. Like other newcomers, I had been formally "baptized" into that country previously, so that the ancestors would "know" me and not be malevolent (as they are reported to be to trespassers). Even so, at each site the elders explained our purpose to the ancestral beings: "We have come here with Ronnie, she is going to take photographs and write things down for us." Some of the more powerful places had traditionally demanded very respectful rituals. Thus at Stormbird Story place, where collective "fish poisoning" used to take place,[14] it was necessary for young boys to pull branches from the overhanging trees using a hooked stick, but without looking up, going only by the trees' shadows on the ground.

> *See here, I gotta go like that. I can't look up, there's the story here. Break that limb, next feller come along. Head down, I can't look up … cut him, tie 'em up in a bundle, right, go. Keep on walk… This really story ground here … he very good Law this feller*. (Lefty Yam, Kunjen elder)

Other places had strict prohibitions: for example, Darkness Story Place links several important creation myths involving rainmaking and the bringing of fire to humankind. Even though the elders noted that, like other story places, it has unusually large and productive fruit trees due to the focus of ancestral power, it is forbidden to camp at the site, to collect any bush medicine, food, or materials, or to hunt there. It is a dangerous place, with any transgression resulting in illness or injury, and it has been known to try to take things, including horses:

> *And that's where we lost one horse, right here. Right here, see that big tree there – they bin hold him. They [the ancestors] won't let go. Lot of us bin try, try to get him, you know, chase him back to the yard there… He stand there, he not be dead… "Come on, you better come with us," we bin sing out [to the ancestors], "Oy, don't hold that horse here! I want to go home!"* (Lefty Yam, Ronnie Smiler, and Victor Highbury, 1992)

The ancestral stories provide a rich narrative of creative place-making. In them, totemic beings – usually in the form of birds and animals – hunt, gather, cook and fish, fight, fornicate, and but above all make

[14] This entailed a large social gathering around a waterhole. Fish poisoning involves the use of bundles of sticks from a particular tree whose sap stuns fish, causing them to float to the surface. Having been collected they would be made into "fish cakes" for storage.

the features of the landscape. They bring rain, fire, wind, floods and storms; they push up sand ridges; wriggle through the land as snakes making rivers and creeks; they stick their spears in the ground making trees, or chop logs causing chips to fly everywhere and make plants; they release whole species of animals into the world. They define morals and social behavior; detail the ecological knowledge necessary for a successful hunter–gatherer economy; perform systems of trade and exchange. They also develop rituals and magic; generate "spirit children," and provide an entire cosmology of life and death, space and time. At the end of the creative era, they "sat down" into the land to provide clan ancestors, thus distributing people both socially and spatially in the landscape, and providing a permanent link between each individual and her or his "home" place.[15] They are visible as particular features of the landscape: for example, two date palms at Two Girls Story Place "stand for" the two women swallowed by a rainbow catfish at the site. At Emu Story Place, a creek bears the shape of the emu that, in a fight with Brolga, fell from the sky. More generally, though, the ancestral beings remain in the land as immanent, sentient forces, taking responsibility for the care of that landscape in partnership with their human descendents.

The ancestral stories are therefore not just a body of knowledge which informs every aspect of Aboriginal life, but also a metaphorical indigenous narrative for the process through which cultural landscapes are made. In this sense, the narratives of place offered by the Kunjen elders are, in themselves, a vernacular process of mapping, demonstrating that people do this all the time, as a way of "being in the world." This is amply demonstrated, for example, by the ethnohistorical material that emerged relating to their relatively recent involvement in stockwork. A map of dinner camps, mustering yards, and community history was overlaid on that of the ancestral story places. By articulating and representing this information formally, our cultural mapping project simply made this process and its cultural particularity more visible and explicit, which is, after all, the major purpose of ethnographic research. In effect, the elders were "reading the country" to me, drawing out the knowledge and history embedded in it, and pointing to the meanings of each local feature – which is how cultural mapping functions to enable anthropologists and historians to understand people's interactions with places.

[15] This is the site from which a person's spirit emerges, and to which it must be ritually returned upon their death.

When the data collection for the cultural mapping was complete, my task for the community was to create a report that laid out the information in a coherent way.[16] Following an introduction giving some ethnographic background and explaining the hybridity of the methods used, this was primarily composed of detailed site descriptions (in accord with the *pro forma*) and maps overlaying ancestral sites and tracks onto existing OS maps of the area. The oral material was transcribed and included *verbatim*, but, as Aboriginal narratives are often intensely circular and so confusing in written form, I also summarized the stories in a more readable linear form. This highlights the way in which representational forms themselves constrain or direct narrative style. The written reports were accompanied by photographs and by video and audio tapes, recording not only the stories and site visits from the park area, but also songs and dances relating these, sung and performed at other times during the fieldwork.

My own research had a different set of needs, requiring the analysis of the data, and the elucidation of findings. Here it was useful to consider Banks' comments about the analysis of visual material:

> In broad terms, social research about pictures involves three sets of questions (i) what is the image of, what is its content? (ii) who took it or made it, when and why? and (iii) how do other people come to have it, how do they read it, what do they do with it? (Banks 2001: 7)

Thus, in considering maps (collaborative or otherwise), it is useful to consider what elements people have chosen to include or exclude; what is prioritized; how the images express relations between things; and how places, people and events are formally represented. Researchers should consider which members of a community are given responsibility for making maps (and why); and how other people within the community and elsewhere engage with these representations.

But cultural mapping produces far more than visual images. As will be apparent from the case study, it makes use of discursive representational forms, eliciting oral histories and narrative accounts of places and events. Various approaches have been developed for parsing and analyzing narrative representations, building on early work, such as Barthes' structural analysis of narrative (1977). Derrida's deconstructive approach has also been influential, with Boje recommending

[16] I produced several reports following this format between 1994 and 2002. These remain confidential to the community and can only be accessed with the Kunjen elders' permission.

a series of steps considering the dichotomies or bipolarities in a narrative, its hierarchies, and its subaltern or excluded voices and issues (2001).

> Narrative analysis takes as its object of investigation the story itself… Interpretation is inevitable because narratives are representations… Human agency and imagination determine what gets included and excluded in narrativization, how events are plotted, and what they are supposed to mean. Individuals construct past events and actions in personal narratives to claim identities and construct lives. (Huberman and Miles 2002: 218)

Such analyses can be close-grained, particularly when interviews are recorded and transcribed *verbatim*. As van Maanen says: "crunching text requires text to be first put in crunchable form" (1988: 13). "Crunching" increasingly entails critical discourse analysis, which considers the relationships between language, ideology and power: "Power is conceptualised both in terms of asymmetries between participants in discourse events, and in terms of unequal capacity to control how texts are produced, distributed and consumed" (Fairclough 1995: 1).

There is obvious resonance between these approaches to narrative and Banks' recommendations regarding visual media. Both visual and textual media are amenable to analyses that consider their semiotic and symbolic structures, as well as the social and political relationships that they encapsulate. Maps employ specific graphic forms ranging from the multivalent symbols of Aboriginal dot paintings (see Morphy 1991) to the much more generic and explicit "universal" symbols of ordnance and survey maps. In this sense they may be said to have their own visual languages which are highly revealing of particular cultural worldviews.

The range of methods of collecting data in the National Park therefore produced material that could be interrogated in a number of ways. As well as enabling the cross-checking and triangulation of information for factual consistencies,[17] it allowed for a close-grained analysis of both textual and visual material to reveal recurrent themes

[17] Over time it revealed an enormous consistency in the ancestral stories and their location in place. About a decade later I did some cultural mapping in an area contiguous to the park, which was also crossed by some of the ancestral tracks running across the park area. The elder being interviewed recounted the whole story of each track, including the sections situated in the park. I compared it to the recording I had made in the earlier mapping expedition, and it was almost

and patterns. This provided a firm foundation for an ethnographic analysis, and also become part of the community archive.

The outcome was thus, as Flores described it, several hybrid products which fulfilled the goals of all parties (2004). For the elders, it created a resource which has been intensively used to educate younger members of the community, and to provide legal evidence for the community's efforts to reclaim its traditional land. It has assisted negotiations with the Queensland Parks and Wildlife Service, gaining the community special use rights and a co-managerial role in the Mitchell-Alice National Park. It has provided translatory material for the education of outsiders about Aboriginal culture, and supported the community's efforts to gain self-determination and a role in the wider management of the Mitchell River catchment. It led to my own involvement in further collaborative mapping expeditions, which over time have broadened into being training exercises for younger people, designed to establish more independent cultural mapping activities in the community.

This work was also invaluable in advancing my understanding of Aboriginal cultural landscapes. It provided useful experience of a methodology which could be applied elsewhere, and I have regularly employed similar methods in research with cattle graziers in the Mitchell River area, visiting the sites that they define as being important, and recording a wealth of data about their own uses of these; their perceptions about local ecology and landscape; their historical accounts; and their current engagements with places. Often, because both Aboriginal and non-Aboriginal land uses require reliable water sources, these are the same sites that I have visited with Aboriginal elders, but as I have noted previously (1997), they are very different cultural landscapes.

In recent years I have made extensive use of cultural mapping techniques, for example, in the UK with water users along the River Stour in Dorset. This research involved collaboration with an Arts and Environment group, Common Ground, whose project *Confluence* produced a cultural map unusual in European terms (though familiar to Aboriginal people) – a series of stories and musical compositions about places along the river. In Australia I have continued to do cultural

> 100% consistent with the version recorded then. I mention this in particular, because in the increasingly bitter contests over land ownership in Australia, those opposed to Aboriginal claims often accuse them of "making things up." Evidence of such consistency is therefore critical in the legal arena, emphasizing the potential legal utility (and risks) of cultural mapping.

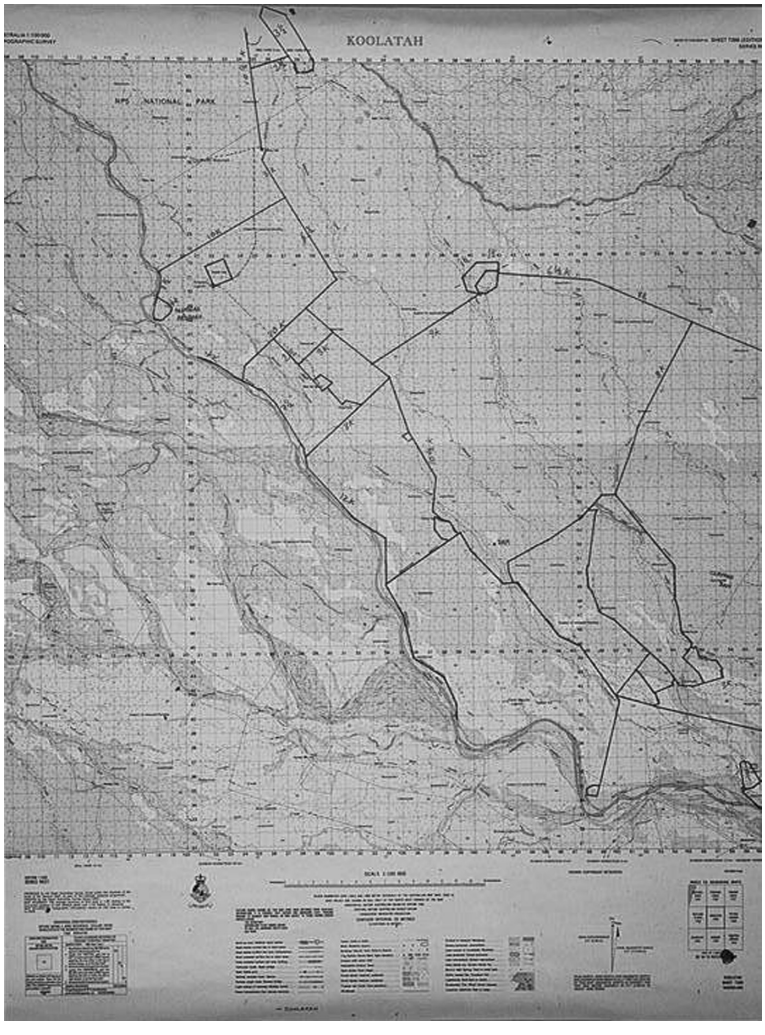


Figure 7.2 Map of paddocks and yards, Koolatah cattle station, Cape York.

mapping in the Mitchell and Brisbane River catchments, exploring the environmental engagements and territorially situated histories not only of Aboriginal people and graziers, but also of local farmers, miners, industries, catchment management groups, and recreational water users (Strang 2009).

I also give close consideration to the maps that informants use in their daily lives. For example, Australian graziers generally use

standard OS maps, but superimpose upon them the things that they consider vital. Thus their additions focus on the roads, fencelines, dams, bores and paddocks they have constructed; the names that they have given to places; and information relating to water and fodder supplies (see Figure 7.2). They use the maps to describe and organize an annual cycle of movement of stockworkers, horses, cattle, and maintenance activities. Miners' maps similarly provide insights into a wholly different perspective, in which the landscape is seen in both spatial and temporal strata of soil and mineral deposition. For recreational water users, the focus is on fish or wildlife distributions, and aesthetic and sensory experiences of place (Strang 1996). Each mapping process therefore illuminates each group's particular engagements with place.

## CONCLUSION

I have outlined above a quite detailed and formal process of cultural mapping: one that gives substantial depth to a research process. But this kind of methodology can be conducted much less formally too. Perhaps the most important element of cultural mapping is that it entails movement through places. This movement creates a very different kind of ethnographic interview. Even the simplest walkabout with a farmer on his or her land is vastly more informative than a static interview in the kitchen. A stroll down to the field to see how the carrots or melons are growing opens up discussions about access to water, and changes in rural life over time. A meander through the garden highlights the careful efforts that people make to create green oases in a dry country. In motion, people are more relaxed and forthcoming, and some of the most productive interviews I have had have been on long musters on horseback, where traditionally taciturn stock workers become more willing to open up and chat. There are some technical challenges that come with this approach! It makes audio recording difficult (though not impossible), and photography somewhat risky to both person and equipment. Similarly, canoe trips with recreational water users, while wonderful in unfolding their experiences of river environs, does present some risk to expensive equipment (see Figure 7.3).

However, even allowing for less than ideal recording quality (and at times transcription hell), cultural mapping and interviewing people *in situ* does, I believe, have significant advantages in terms of data quality. As well as providing opportunities to draw on the mnemonic value

Figure 7.3 Mapping in motion: long cattle drives offer useful opportunities for interviews.

of the physical landscape to elicit a wide range of data, cultural mapping provides participatory and observational opportunities to consider the places themselves, and the everyday engagements that people have with them. As a collaborative and active exercise, it builds productive relationships between researchers and informants. It produces representational objects that can be further interrogated analytically, and which have multiple use values for host communities. I would therefore suggest that, as an approach to ethnographic and ethnohistorical data collection and analysis, cultural mapping offers one of the most useful and informative methods available to researchers.

There is considerable potential for the expansion of cultural mapping into a wider range of representational forms. Pink observes that "visual and digital technologies are becoming more economically accessible and 'user friendly'" (2006: 19). Computer programs are increasingly interactive, enabling highly dynamic representations that readily encompass both spatial and temporal change: "Besides being able to draw a new map literally in the blink of an eye, the computer is capable of displaying time dynamically… These capabilities have allowed the easy generation of 'map movies', and cartography in general has become an interactive tool" (Peuquet 2002: 155).

Researchers are now producing cultural maps that involve the combination of digital photography, video, and audio recordings with

satellite imagery, GPS data, and other spatial representations. They also draw in other datasets, such as demographic information, land ownership and use data, and ecological information (see Vassilopoulos *et al*. 2008). Such projects are often directed towards widening access: thus Vanclay, Wills, and Lane (2008) report on a museum outreach program using web-based technologies and giving digital cameras to participating communities in the Murray-Darling river basin. "'Basin Bytes' was a digital photography, storytelling and collecting project [which] asked a range of participants in regional communities to reflect on their local landscape and sense of place through images and stories" (2008: 282).

The Centre for Research and Information Outreach (CRIO) at the Australian National University has produced a range of interactive web sites using a range of digital media to explicate and further develop cross-cultural research projects. This body of work highlights the utility of more flexible representational forms that, by encompassing multiple dimensions of spatial and temporal information dynamically, can assist theoretical and analytical developments in anthropology . These also have useful potential application in interdisciplinary research, bringing together diverse datasets, such as hydrological, ecological and social data. In recent years I have been working with some UNESCO colleagues to bring cultural mapping techniques into interdisciplinary water management. Such work presents significant technical and epistemological challenges, but promises much in terms of integrating concepts across disciplinary boundaries.

There are some cautionary considerations too. Every form of representation has a recursive life of its own, and researchers need to consider the cultural effects of collaborations directed towards hybrid representational forms. As Andrew Lattas notes (pers. comm. 2009), "landscapes are mapped onto people," and the representations that are produced therefore have meaningful implications for them. Even with more flexible technical methods for incorporating dynamic change over time, there is a tendency for cultural maps to fix boundaries and lifeways. This can be potentially positive and/or negative, enabling the preservation of cultural knowledge and assisting people's efforts to maintain continuities, but also inhibiting movement and underemphasizing the fluidity of cultural processes and environmental change. The reduction necessary to create comprehensible maps can obscure issues such as the contestation of spaces, intergenerational differences in engagements with places, and subaltern perspectives. And, even in the most apparently uncontroversial social

environments, map-making almost always has a political dimension which needs careful consideration. Nevertheless, conducted ethically, and with scientific rigor, it has a great deal to offer researchers and the communities with whom they work.

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